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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,202	10/30/2003	Michael J. Tsecouras	TI-35523	2202
23494 7590 03/07/2007 TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			EXAMINER CORRIELUS, JEAN B	
			ART UNIT	PAPER NUMBER
			2611	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/07/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/697,202

Applicant(s)

TSECOURAS, MICHAEL J.

Examiner

Jean B. Corrielus

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-11,13 and 15-18 is/are rejected.
- 7) ☒ Claim(s) 7,8,12, 14,19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/30/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because the drawing quality is poor and therefore needs to be resubmitted. In addition, each label "figure" should be replaced by "FIG." Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Double Patenting***

2. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or

Art Unit: 2611

discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

3. Claim 13 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 12. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3, 4 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Shintani et al US Patent No. 6,490,001.

As per claim 1, Shintani discloses a method and apparatus figs. 1-3 comprising: a controller circuit 31; a user interface 32 connected to the controller circuit 31 that provides user input to the controller 31 which indicates the user's selection of an RF channel see col. 8, lines 29-32 and 50-57; a RF tuner 12; and a programmable filter 223 that receives a signal from the RF tuner 12 and filter program settings from the controller 31 and then filters the signal from the RF tuner 12 based on the filter program settings received from the controller 31; wherein the program settings for the programmable filter 223 determined by the controller depend on the RF channel selected by the user see fig. 3A.

As per claim 3, the programmable filter 223 is a digital filter since it is configured to process a digital signal generated by the digitizer 221.

As per claim 4, Shintani teaches a speaker 44 for outputting the signal from the filter 223. The speaker inherently has to include an amplifier in order to boost the signal energy.

As per claim 15, see claim 1. Note in Shintani teaches that the filter 223 is part of a DSP 22 see fig. 2.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2611

7. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al US Patent No. 6,490,001 in view of Melanson US Patent publication No. 20040100328.

As per claim 2, as applied to claim 1 above, Shintani et al discloses every feature of the claimed invention but does not explicitly teach the additional limitation of a switched mode power supply that supplies power to the circuit and source of unwanted noise. Melanson discloses a switched mode power supply 115 that supplies power to the circuit and a source of unwanted noise see section 0009. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Shintani et al because in order for the various components of device to work it needs to be provided adequate power signal and the teaching of Melanson would be a good source of power supply to energize the circuit.

As per claim 16, see claim 2.

8. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al US Patent No. 6,490,001.

As per claim 9, as applied to claim 1 above, Shintani et al discloses every feature of the claimed invention but does not teach that the filter is a programmable switched capacitor filter. However, it is well known in the art to implement a filter as a switched capacitor filter. Given that fact, it would have been obvious to one skill in the art to implement the digital filter as a programmable switched capacitor filter in order to take advantage of its enhanced technological features.

As per claim 11, see claim 9.

9. Claims 5-6, 10, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani et al US Patent No. 6,490,001 in view of Yamamoto et al US Patent publication No. 20060133777.

As per claim 5, as applied to claim 1 above, Shintani et al discloses every feature of the claimed invention but does not explicitly teach the digital filter outputs a filtered digital signal to an D/A converter, and an analog signal from the D/A converter is amplified by an analog class A/B amplifier. Yamamoto discloses a digital filter 120 outputs a filtered digital signal to an D/A converter 121, and an analog signal from the D/A converter is amplified by an analog amplifier 122. It would have been obvious to one skill in the art to incorporate such a teaching in Shintani et al in order to format the signal in a manner suitable to be processed by an analog circuit device such as an analog speaker. Furthermore, it would have been obvious to use a type A/B amplifier so as to satisfy system design requirement.

As per claim 6, see claim 5 above and addition, one would have been motivated to used a class D amplifier the motivation would have been to satisfy system design requirements.

As per claim 10, see claim 6.

As per claim 17, see claim 5.

As per claim 18, see claim 6.

***Allowable Subject Matter***


Art Unit: 2611

10. Claims 7-8, 12, 14, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jean B Corrielus  
Primary Examiner  
Art Unit 2611

3-5-07